

## A Chronicle of Charles Macdonald's Explorations in Concrete



The Blue Cottage at Huntington Point

Volume 1

Freelab 2000  
Faculty of Architecture  
Dalhousie University



Blue Cottage  
ink on mylar with collage, Carol Savoie

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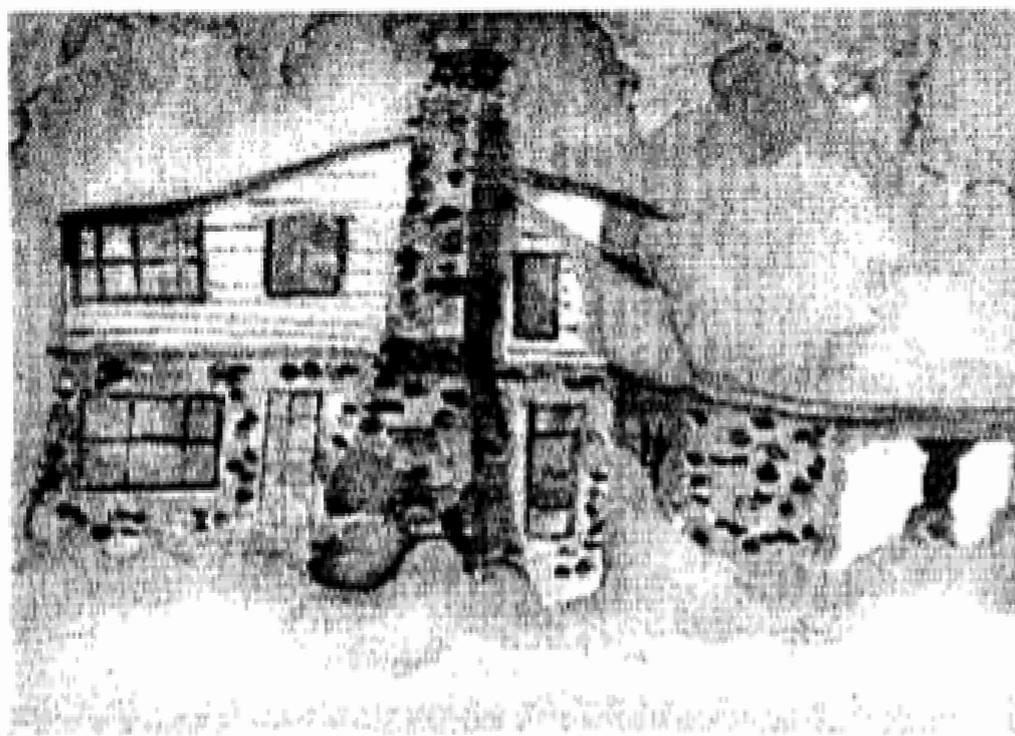
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**Blue Cottage**  
watercolour on paper, Jennet Bowdridge

## Introduction

We spent the three-week Free Lab in July 2000 researching and recording the Charles Macdonald cottages at Huntington Point, NS, which is located about five kilometers north-west of Hall's Harbour. Charles Macdonald owned a co-operative concrete factory in Centreville, which is between Hall's Harbour and Kentville on Highway 359, and he designed and built six concrete buildings in the Annapolis Valley. He built the factory building, which later became his house, in Centreville in 1915, and then between 1934 and 1938 he built five cottages at Huntington Point, four of which are still standing.

Given the short duration of the study period, we collected general information on all of the six concrete buildings that Charles Macdonald built, but focused our study on the cottage known as the "Blue Cottage" for its blue roof. The cottage is owned by the Charles Macdonald House of Centreville Society. We made a number of other visits to the site during the study period, including spending one night in the cottage itself.

This document is a summary of our three-week study in text, photographs, sketches, paintings, and hardline drawings. However, it should be mentioned that there is still much to be covered before these cottages, and the house in Centreville, are completely documented. Given their age and condition, it is hoped that additional information will be collected in the near future.



View from Blue Cottage  
watercolour on paper, Lynda Ursaki

## Acknowledgments

We would like to thank the following people for their invaluable contributions to this project:

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main floor fireplace, Blue Cottage

Charles William Macdonald  
(April 5, 1874 - May 28, 1967)



Charles Macdonald, "Steam Mill (Homestead Road)", n.d., oil on canvas board



Charles Macdonald, "Three Sisters, Cape Breton Island" (above fireplace in Jeffersons' Cottage) c.1936, oil on concrete

Charles Macdonald was, among many things, a naturalist, artist, merchant seaman, manufacturer, and socialist. He was born on April 5, 1874, the second of six children of a farming family at Steam Mill, Nova Scotia. His interests and artistic abilities were at odds with both farming and school life, and he left school at the age of 15 to work as an apprentice, first with Woodman's Coffin Factory and then with the Nova Scotia Carriage Company. During his youth, he filled sketchbooks with images of farm life: homesteads, animal studies, trees, and local people.

In 1898, at the age of 24, Macdonald left Nova Scotia for New York, where he signed on as a ship's carpenter with the Baltimore clipper, "Francis S. Hampshire," which was bound for Santos, Brazil. Between May 1898 and December 1902, he served aboard a number of merchant vessels that traveled to the major ports of Europe, India, Russia, the Caribbean, and North and South America. He chronicled his years abroad in a number of different ways: drawings and paintings, journals, letters, photographs, and postcards.

He filled sketchbooks with drawings and paintings of life at sea and the places he visited. His drawings and paintings show a remarkable ability to capture the life of the places, people, things, and events that he saw during his travels. Between May 6 and the end of September 1898, he kept a prose logbook of his journey to Santos, Brazil. He kept another small diary of his travels around Britain in 1902. His journals reveal his primary interest as a naturalist, but they also make reference to the picturesque and architectural scenery.

While in Havana, Cuba, Macdonald started an album of photographs and postcards. The photos can be divided into roughly three types: architectural, monumental, and human interest.<sup>2</sup> The Spanish style house that was so common in Santos, of which he included many images in both his sketchbook and album, may have been a prototype for the concrete house that he built in Centreville in 1915.

In a letter to his sister, he also described Santos:

*I got a lot of sketches. One can hardly turn around without seeing something worth drawing... Then the city stretched along the riverside the houses low and close together with now and then a church or some public building rising above the rest. There is a great difference between Santos and our northern cities, there is so much color here some houses are painted red some blue others green or yellow (there are no wooden houses here) and the roofs tiled all colors from light gray to bright red.<sup>3</sup>*

The colourful concrete cottages at Huntington Point can also be traced to his travels in Brazil and elsewhere.

Macdonald collected a number of souvenir postcards depicting the works of artists he had seen in the museums and art galleries, and the monumental sculptures and public buildings he had visited in Europe. In particular, the images from St. Petersburg appear to have intrigued him: Peter the Great, Souvoroff, Byzantine Church architecture, and the Bridge of Alexander with its concrete piers.<sup>4</sup>

After returning from his sea travels, Macdonald spent a number of years in Steam Mill, but traveled to British Columbia and Alaska between about 1908 and 1912. While in Vancouver, he was active in the socialist movement that emerged after the 1907 anti-Asian riots. His reforming, humanitarian, socialist principles can be traced to those of his grandfather, Reverend John Macdonald, and he was further exposed to Marxist ideas while working with Scottish emigrants at the Nova Scotia Carriage Company. The 1890s was a period in which the "working-class recognition of Marxism developed rapidly" in Canada.<sup>5</sup> Macdonald's socialist-communist resolve was hardened by his travels, during which he saw great poverty in such places as Bombay. He kept a small notebook with newspaper clippings about socialism, world economics, and populations, and elections in which



Charles Macdonald, "In Santos, Brazil", 1899, watercolour on paper



Charles Macdonald, "Pompeii and Vesuvius", c. 1900, watercolour on paper



Macdonald House, Centreville



fireplace, Macdonald House

socialist-communist candidates were running.<sup>6</sup> His socialist-communist ideology included the collectivization of capitalist property, the democratic organization of workers, and the production for use rather than profit.<sup>7</sup>

Following his return to Centreville in about 1912, Macdonald established Kentville Concrete Products Ltd. as a cooperative partnership with his employees. He saw the company as an opportunity to create local employment, and he was a generous employer who paid nearly double the going rate and put aside a portion of the wages for the employees to draw on during the winter when contracts were scarce.<sup>8</sup> The employees also benefited from Macdonald's foresight during the Depression when he was able to keep most of them on the pay roll. He created make-work projects, like the Huntington Point cottages, to keep them busy during the quiet times. In the 1920s, he moved the company to Kentville. Following his death in 1967, the company was turned over to his employees, who operated it for a number of years before selling to a Dutch company.<sup>9</sup>

Macdonald was impressed by concrete's beauty, strength and inflammability. The material was also part of a worldwide, modernist, socialist movement, which included ideas about using new building materials and techniques to distinguish the new from the old order. The economical material fit well into Macdonald's utopian sensibilities about communism, and he started by constructing the Factory building in Centreville using concrete. He used A.A. Houghton's Concrete Worker's Reference Books (Norman W. Henley, NY, 1911, 14 vols.), which also included directions for fountains and lawn ornaments. He also read The Source Book encyclopedia, which had articles about "Cements" and "Concrete."

In 1916, Macdonald married 18-year-old Mabel Misner of Chipman Brook. For a year or so after they were married, Mabel and Charlie lived in a tent on the roof above the Cement factory. Charlie built a second story around the tent, and converted the lower floor from a factory into a house for

Mabel and him.<sup>10</sup>

Macdonald is remembered by many as being a very well read man who always had interesting books "around" the house.<sup>11</sup> He included a transcription of the 5-stanza ballad, "Ben Bolt" at the end of his 1898 journal.<sup>12</sup> He also recorded in his 1902 diary that he occupied his time aboard ship in three ways: teaching himself to play the mandolin, watercolour sketching and drawing, and reading and writing (letters). He also read art, technical, and socialist magazines to keep abreast of new ideas. Although the exact contents of his library are not known, the house in Centreville and the cottages at Huntington Point show features that indicate his knowledge of contemporary architectural movements in Europe. However, he pushed beyond the pictures of these contemporary buildings that were made from stone or brick plastered over to look as if they had been made from concrete to create true reinforced concrete structures. The house in Centreville was the first reinforced concrete building in the Annapolis Valley, and was built only twenty years after the first reinforced concrete building was built in Europe.<sup>13</sup> Macdonald was truly a man ahead of his time.



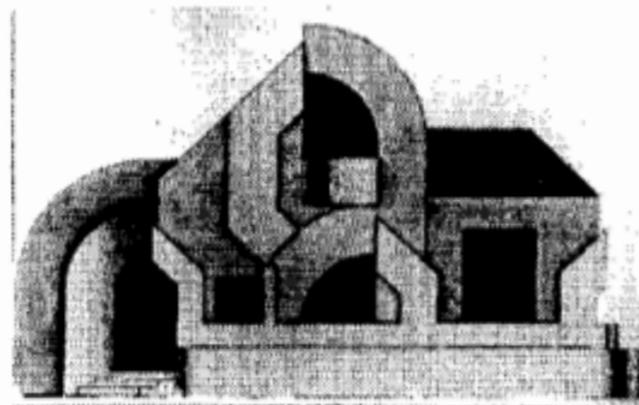
Charles Macdonald with sculpted concrete deer, Centreville, n.d.

## Background Information

### Modern Concrete Architecture: 1900-1938.



Peter Behrens, Turbinenfabrik (1909), Berlin



Jaroslav Fragner, Sketch (1921)

Charles Macdonald was a literate man, who read many books and magazines about a variety of topics, including socialism, communism, art, cement technology, and probably also architecture. It is important to situate his vernacular buildings within the context of the larger architectural world of his time. It is also important to do so because, through his travels and readings, Macdonald was inspired by the architecture of others.

### Brief History of Reinforced Concrete

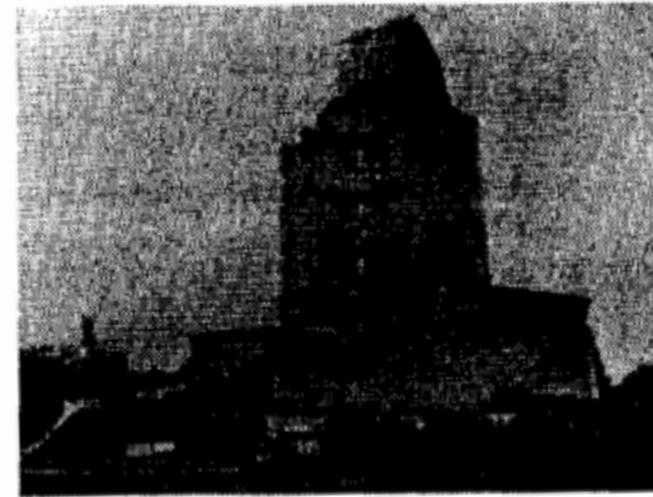
Concrete has been used in various forms since the Roman Empire. However, the pioneering work on reinforced (ferro) concrete was not done until the nineteenth century when inventors explored the use of iron because of its tensile strength. Among the first to patent the new material were W.B. Wilkinson, who patented a device for making reinforced concrete floors using flat iron rods in 1854, François Coignet, who obtained a patent for a similar process a year later, and Joseph Monier, who patented his reinforced concrete flower tubs that used iron rods and meshing in time for the 1867 Paris Exhibition.

It was not until the early twentieth century, however, that concrete became an architectural medium. In 1892, François Hennebique erected the first building made entirely of ferro-concrete and introduced the basis for the slab-and-beam construction.<sup>14</sup> From 1900 to 1914, reinforced concrete was used primarily for factory buildings, warehouses, and occasionally office buildings, such as Sir Henry Tanner's 1907 General Post Office in London. Auguste Perret designed and built three important concrete buildings in Paris that brought out the medium's aesthetic qualities: the rue Franklin (1903), the garage on the rue Ponthieu (1905), and the Théâtre des Champs-Élysées (1911).<sup>15</sup> Peter Behrens' 1909 AEG Turbinenfabrik (turbine factory) in Berlin was the first industrial building to be successfully incorporated into mainstream European architecture.<sup>16</sup> World War I also led to further

advances in concrete construction technology.

Although ferroconcrete offered new possibilities for architectural design, many early Modernist architects were conservative in their exploration of the material, using it as a substitute for wood or steel framing. Modernist buildings continued to be made of traditional materials like stone and brick, which were then covered over to *look* like concrete.<sup>17</sup> For example, Gaudí's Casa Milá (1905-10) in Barcelona, Spain was built of massive stone blocks that looked like concrete. Erich Mendelsohn's Einstein Tower (1920-21) outside Potsdam, Germany was intended to be made entirely from concrete. However, shortages following World War I resulted in only the base and cupola being made of concrete. The main structure was made from brick, which was then plastered in concrete to give the whole structure a uniform appearance.<sup>18</sup> The Einstein Tower was one of the first buildings to integrate, if only in its intention, "stylistic experimentation, constructional innovation, and disparate influences from the surrounding culture."<sup>19</sup> Because of its physical presence and association with Einstein's Theory of Relativity, it quickly became the "most startling new building in Germany" and the most famous building of its day.<sup>20</sup> Max Berg's Jahrhunderthalle (1912-13) in Breslau was the only early Modernist building to explore the architectural potential of concrete.<sup>21</sup>

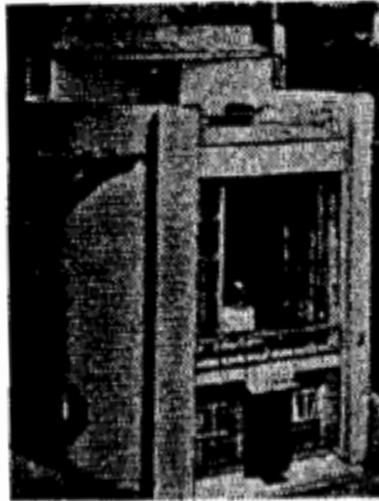
Given his socialist-communist ideology and artistic interest, Charles Macdonald may have had knowledge of early Soviet architecture, which explored new materials and techniques with strong social and political agendas. Following the Russian Revolution in 1917, architects responded with creative projects that were designed to shape the new state. Many of these were highly experimental and utopian in scope, and, as such, few were actually built but many of the coloured drawings and sketches were published in books. Post-revolutionary Russian architecture was influenced by the cubism of Picasso and by Russian abstract artists, like Kasimir Malevich and Vladimir Tatlin, whose 1918 Monument to the Third International embodied the spirit of the age.<sup>22</sup> Two predomi-



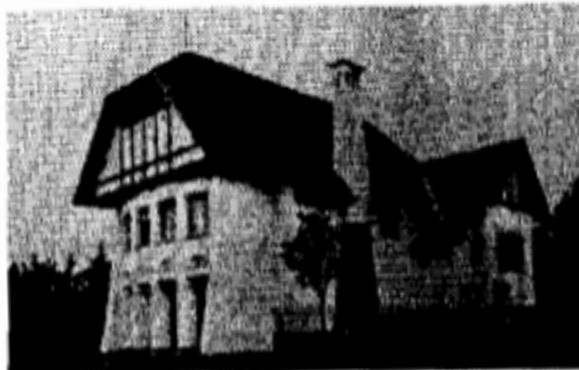
Erich Mendelsohn, Einstein Tower (1920-21), Potsdam, Germany



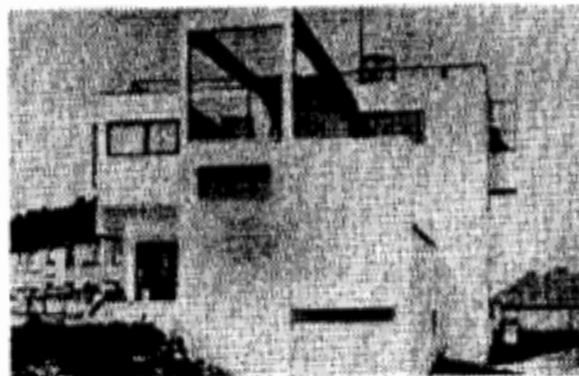
Vladimir Tatlin, Monument to the Third International (1918)



K.S. Melnikov, Melnikov House (1929), Moscow



Jan Kotera, Villa Macha (1903), Bechyne



Evzen Linhart, Villa Linhart (1920-28), Prague

nant factions emerged from this period of experimentation and debate: the Rationalists and the Constructivists. Rationalists emphasized formal and Nikolai Ladovsky (1920).

Constructivists, on the other hand, stressed practical materials for designs that focused on structural and functional concerns, and included Aleksandr and Leonid Vesnin and Moisei Ginzburg. By the late 1920s, designs were less fanciful and took into consideration more practical concerns like cost and materials. For example, Melnikov designed and built an experimental house for his family in 1929. The curved structure, which was designed with two intersecting cylinders, was organized around new principles about living and was built using brick.<sup>23</sup> In 1932, this period of exploration and debate ended when the Party Central Committee decreed that Soviet architecture would follow the ideologies of Socialist Realism. Architects were expected to conform to the authorized style that adapted and blended acceptable traditional elements with modern building technologies.<sup>24</sup>

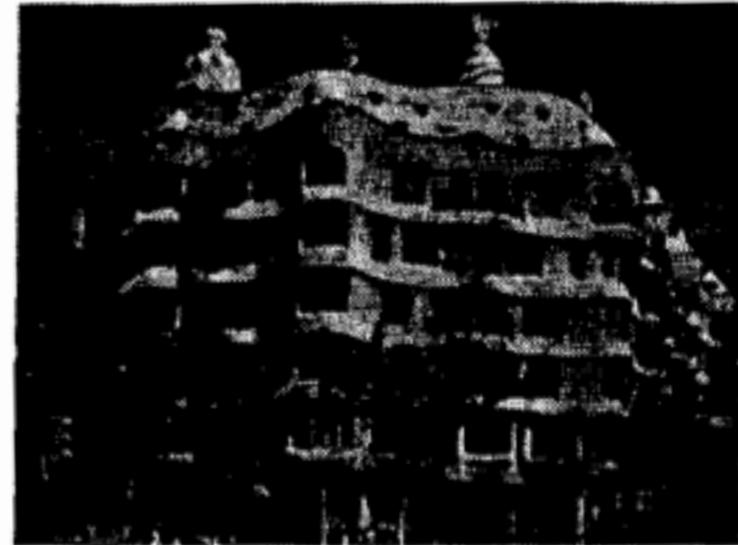
Macdonald may also have been aware of early twentieth century Czech architecture, which explored both traditional building typologies and new forms using new materials and techniques. Early Modern houses by Dusan Jurkovic (Family House, Prague, 1907) and Jan Kotera (Villa Macha, Bechyne, 1903) incorporate traditional house types and have fairy tale-like qualities.<sup>25</sup> However, drawings from the Purism period (1920-23) illustrate the plasticity of form and potential for concrete.

Evzen Linhart's own house, Villa Linhart in Prague, which was constructed between 1926 and 1928, was made using reinforced concrete supports, floors and roof. The exterior walls were finished with lime plaster, and the roof was a "structural slab covered with two-ply roofing felt and three coats of bituminous paint (Mexican Ebanos)."<sup>26</sup>

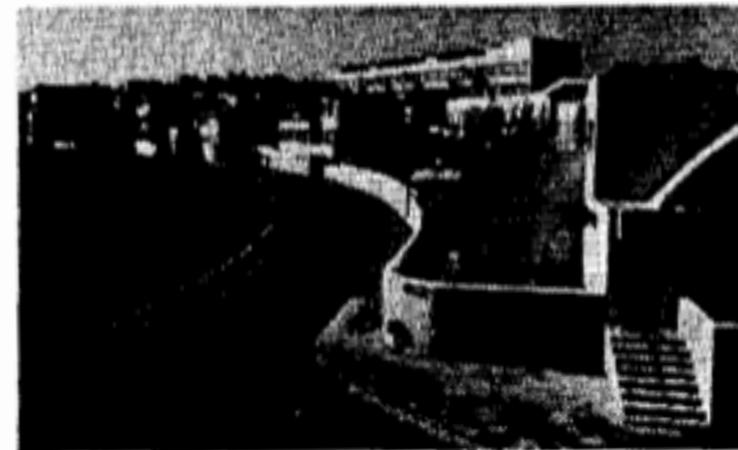
Macdonald may also have been inspired by the works of Gaudí that he saw in publications. The piled-up effect of the stone work and curvaceous, geomorphic elements of such buildings as the Church of Sagrada Familia (1884), Güella Park and Colonia

Güell (1900-1914), Casa Batlló (1905-7), and Casa Milá (1905-10) may have inspired the stone walls, curved roofs and dormers of the Huntington Point cottages.

Macdonald may also have been interested in the Weissenhof Siedlung in Stuttgart (1928). The housing project was a collaborative effort by seventeen of Europe's top architects that included Le Corbusier, Mies van der Rohe, Scharoun, Oud, Behrens, Josef Frank, and the Tauts. Each architect designed a component of the project, which was part of the Weimar Republic's effort to construct mass housing. The project had a stringent budget that meant each component had to be of modest scale with minimalist aesthetics, and made from simple materials. Most of the projects were made using brick or cinder block with stucco facing.<sup>27</sup>



Antonio Gaudí, Casa Milá (1905-10), Barcelona



Weissenhof Siedlung (1928), Stuttgart

## Historical Notes on the Study Site and Surrounding Area

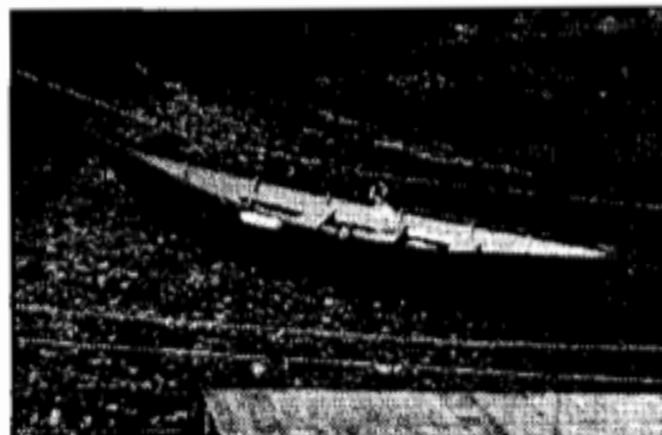


Hall's Harbour

### Hall's Harbour, Kings County, NS

Hall's Harbour is located on the south side of the Bay of Fundy's Minas Channel, on Highway 359 about 20 minutes drive from Kentville. It was named after Samuel Hall, a native of Kings County who returned to the county in 1779 with a privateering band of American revolutionaries. The seventeen privateers made their base in what is now known as Hall's Harbour, and made a number of raids on nearby Loyalist settlements. The local militia managed to capture two of the raiders, but the rest escaped. Samuel Hall was separated from the rest of the group and it is presumed that he returned safely to New England. According to local legend, Hall buried a vast treasure in the muddy banks of the creek that empties into the Harbour, and it was supposedly found last century by a miserly old man in the community.<sup>28</sup>

About 40 years after its infamous beginning, a small settlement developed in Hall's Harbour. Strong ties were developed with Saint John, New Brunswick because the Bay of Fundy was the cheapest way to transport goods to the isolated community.<sup>29</sup> Traditionally, the community's economy focused on fishing, boat-building, and limited farming. However, as the fishing industry has become less predictable, Hall's Harbour has developed itself as a thriving tourist destination with some 50, 000 visitors each summer. In April of this year, Kings County council passed the first reading of the resolution to include Hall's Harbour as a tourist destination area TDA2 (The only other such community in the area is Grand Pré).<sup>30</sup> Hall's Harbour is also home to a number of artisans and summer cottagers, and seven full-time fishing vessels.<sup>31</sup>



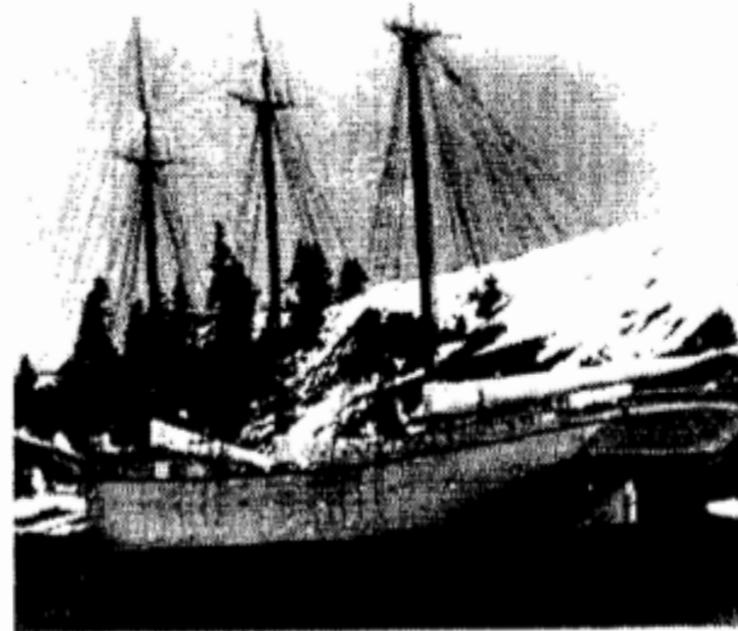
dory, Hall's Harbour

## Huntington Point

Huntington Point is located about five kilometers north-west of Hall's Harbour, off the West Hall's Harbour Road. In the late nineteenth century, the Point was home to a small ship-building community. In about 1916, the Canadian Government commissioned the building of ships for World War I. The most famous vessel built at the Point was the ill-fated schooner, the "Bonna H." It was built between 1917 and 1919 by Edgar and Gordon Hatfield. The brothers rented a piece of land on the shore, known as the Shipyard, from the Pineo's.<sup>32</sup> They built a small sawmill and cookhouse further up the road. The project created a temporary, economic boom for the whole area as they bought local timber and paid good wages to the 25 or 30 men that they hired.<sup>33</sup> The "Bonna H" was launched at Huntington Point on January 15, 1919 and towed to Port Greville to be fitted with spars and rigging.<sup>34</sup> The christening bottle of champagne is supposed not to have broken at the official launch in 1920, and, following a series of disasters, the "Bonna H" caught fire and sank in the Gulf of Mexico in 1921.<sup>35</sup>

The wooden ship-building industry declined in the area after the construction of the "Bonna H," and the Point became a destination for summer vacationers. Some fishermen from Hall's Harbour continued to set up their fish weirs at the Point.<sup>36</sup> Today, Huntington Point has a number of summer cottages and a public beach. There is little sign of its maritime history except for a few decaying fragments of the wharf.

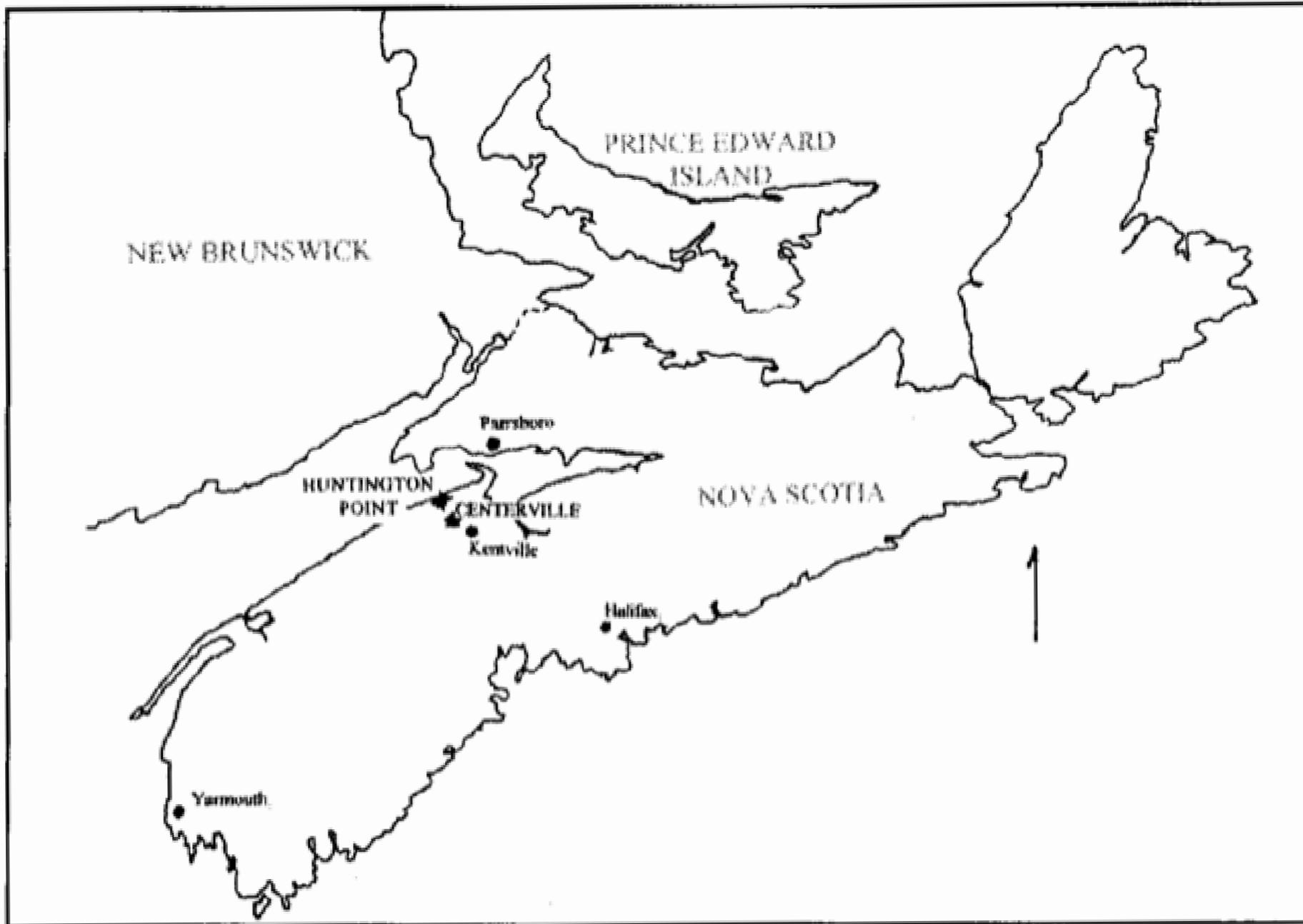
From 1919, Charles and Mabel Macdonald and several of their friends camped at Huntington Point. They purchased a 1 2/3-acre property on the Point in 1934.<sup>37</sup> During the Depression, Macdonald employed his workers from the cement factory to build five cottages as a make-work project when business was slow. He and Mabel used the red roofed cottage as a summer vacation home and rented out the other cottages.<sup>38</sup>



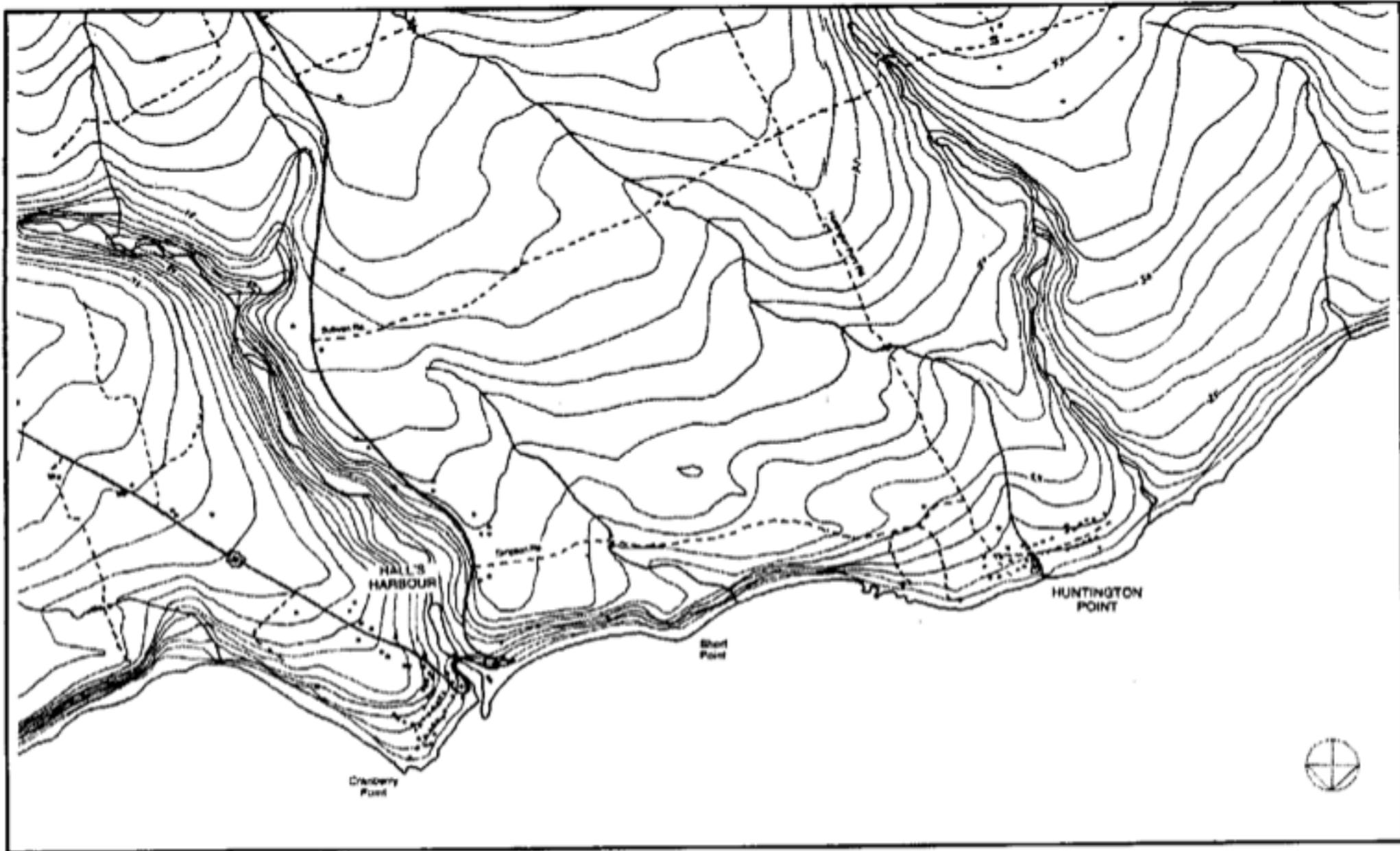
"Bonna H," n.d.



view from Blue Cottage balcony  
watercolour on paper, Wendy James



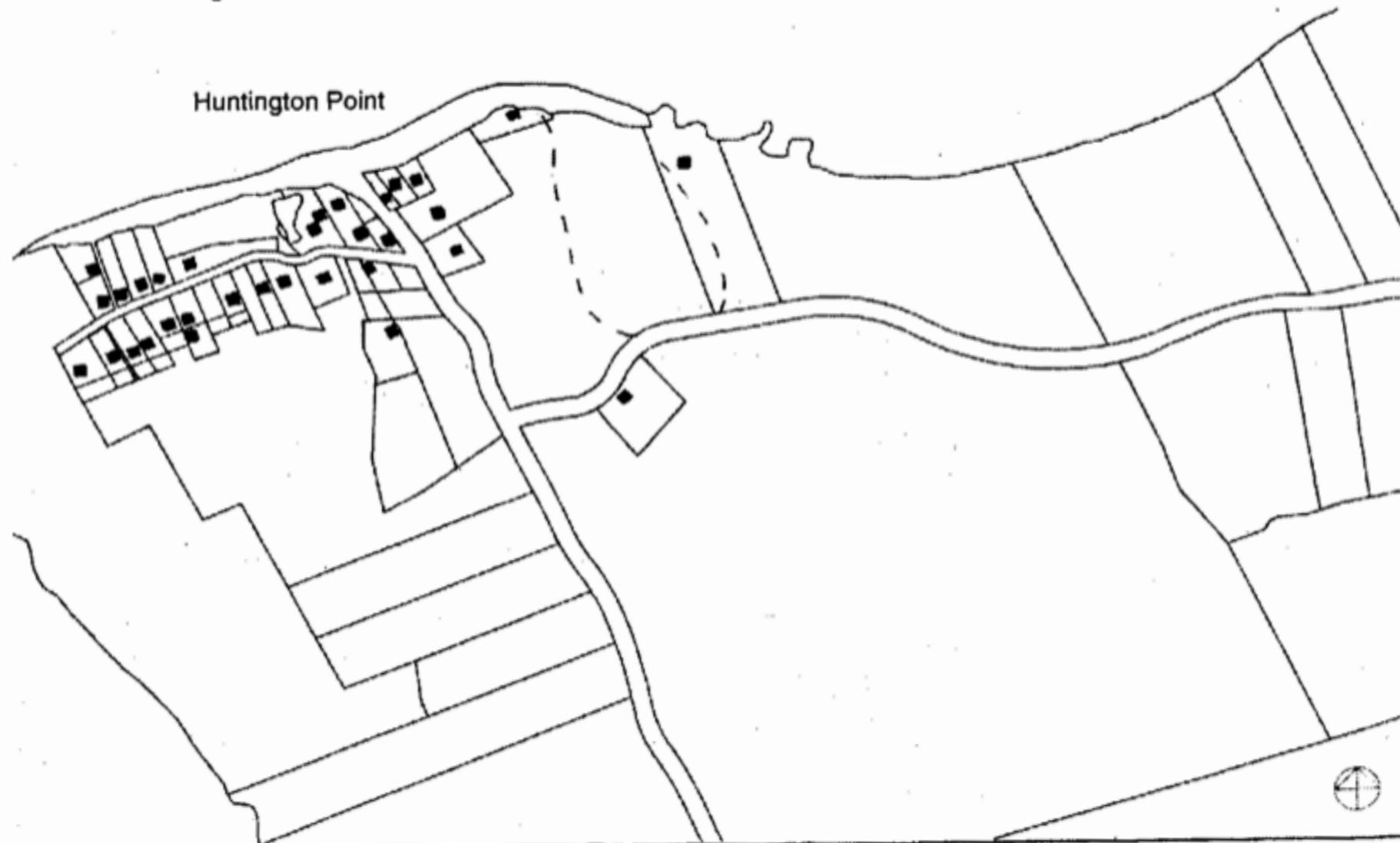
Annapolis Valley, Nova Scotia



Topographical map of Huntington Point and surrounding area



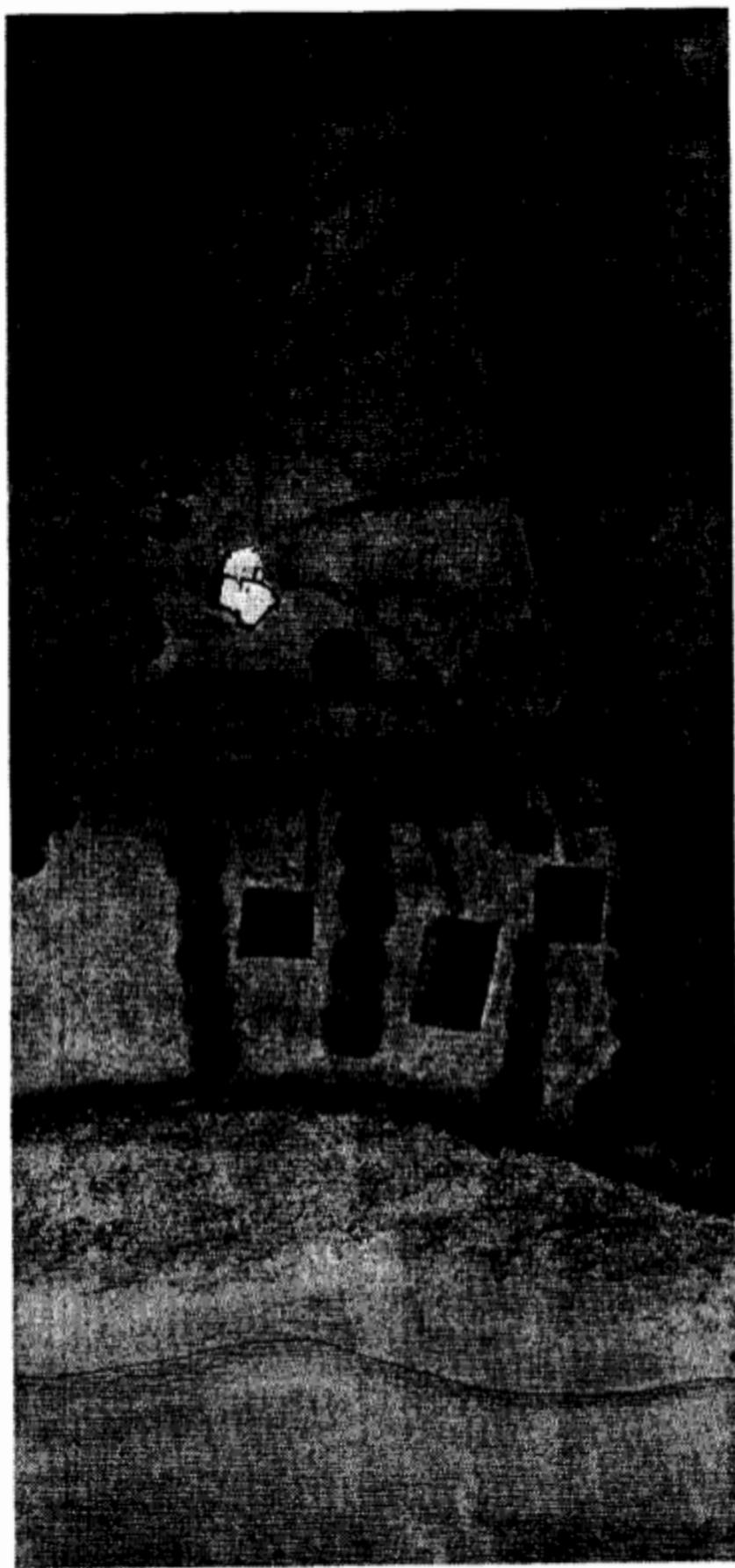
View from Huntington Point beach



Property lines at Huntington Point



This map is a graphical representation of property boundaries which approximate the size, configuration and location of properties. Care has been taken to ensure the best possible quality, however this map is not a land survey and is not intended to be used for legal descriptions or to calculate exact dimensions.



**Site Map of the Macdonald  
cottages**

- 1 Red Cottage
- 2 Blue Cottage
- 3 *former* Teapot Cottage
- 4 Jefferson Cottage
- 5 Green Cottage



## The Buildings

### The Charles Macdonald House, Centreville, NS



Kentville Cement Factory, c. 1912



Macdonald House

The Charles Macdonald House is located at the corner of Saxon Street and Aldershot Road (Highway 359) in Centreville, Nova Scotia, about 15 minutes north of Kentville. It was started in 1915, and was the first building that Charles Macdonald constructed using concrete. The house embodies Karel Honzik's 1932 statement:

*Just as the war brought about tremendous progress in science and industry, so has the villa become a laboratory of new construction techniques and materials and an opportunity for training in and improving the crafts. The problems of interior life and function which the villa has highlighted have become a focal point of architectural work to be applied to the design of large structures and to become the basis of a new architectural methodology.<sup>39</sup>*

It was built in stages, and it has since undergone a number of renovations. Since June 1, 1997, the house has served as the museum, art gallery, and focal point for the Charles Macdonald House of Centreville Society.

The design appears to have been influenced by houses that Macdonald saw while traveling in Brazil, the Caribbean, the Mediterranean, and the Crimea. He does not appear to have used any drawn plans, and he started with the kitchen and pantry before completing the rest of the ground floor, which was used for the cement brick factory. Charles and Mabel added the second story and a second wing about seven years later. The wing included a carport, bathroom, and bird coop. The carport was closed in and converted into a sitting room by a later owner. Charles moved the cement factory to Kentville after he and Mabel finished the additions and moved into the house.

The basement was excavated into the ground and various walls are hardpan while others are of concrete brick. In an interview in 1978, Mabel mentions that the concrete Macdonald used for the foundation was "English cement and was... harder than rock, cause when we put the furnace in we tried to cut through the

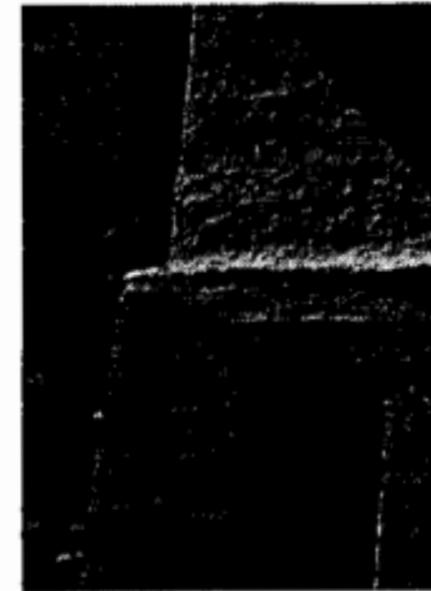
floors... and we had an awful job. It was so hard."<sup>40</sup>

The main floor was also of poured "English cement" and the ceiling was made using concrete beams that were reinforced with three quarter inch iron.<sup>41</sup> Sometime between about 1925 and the 1940s, concrete block walls were put up around the exterior of the house. Mabel Macdonald described the air space created by the new walls: "two rows of blocks outside, and one row of blocks upside the poured concrete, and then there's the air spaces between the wall board and the wall."<sup>42</sup> However, she does not explain why the wall was created, leaving observers to make suppositions: maybe it was to create a cavity wall to prevent moisture from entering the house; for insulation; to add stability to the ground floor; or for aesthetic reasons. The house is also supported by a number of reinforced columns that were moulded on-site by erecting a formwork and then filling it with cement.<sup>43</sup> The upper floor was constructed using concrete blocks, which were then parged. The visual effect created is deceptive because the ground floor appears to be of concrete blocks while the upper floor appears to be poured concrete.

The attic in the side wing has a series of built-in concrete shelves and a number of small rectangular windows just below the eaves. The shelves were used for doves, rabbits, and chinchillas.<sup>44</sup> The windows were originally open for the doves to fly in and out of the coup. The attic shows that the roof was formed using wire mesh, which was parged from both the exterior and interior.

There are a number of other concrete brick houses in Centreville that were inspired by the house and constructed using Macdonald's bricks. He gave his employee-partners credit for building supplies and acted as a mortgagee for many of them.

Macdonald also created the idea of a public retreat on the forested lands behind his house. The area became the Centreville Park. Macdonald's commitment to the communal way of life continued even after his death as he bequest his property to the village of Centreville for use by the people.<sup>45</sup>

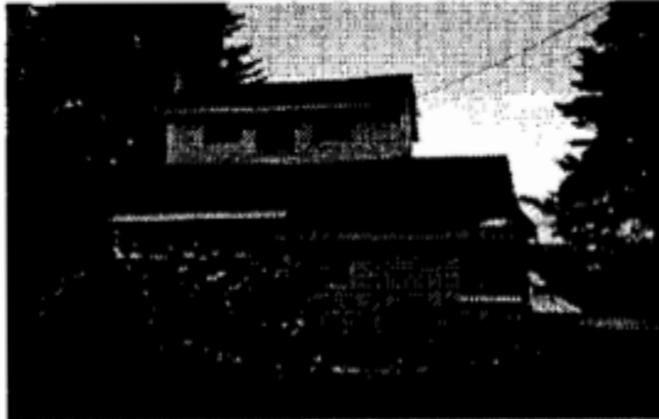


exterior wall detail,  
Macdonald House



staircase, Macdonald House

## The Macdonald Cottages at Huntington Point



Jeffersons' Cottage (1934)

The cottages at Huntington Point were constructed as make-work projects between 1934 and 1938. They were built without plans as experiments in form and material -- more large-scale sculptural works of art than architecture. Mabel Macdonald said that Charlie built the cottages:

*... to see what he could do with cement. See how it will stand near salt water... we always put a tent up [at Huntington Point] so he got the idea that we would build a cottage and then we wouldn't have to tent.<sup>46</sup>*

Of the five original cottages, one has been completely destroyed, two have been heavily renovated and altered, and two remain in close to original condition. Each of the cottages was built differently but had some similar features. Each had a chimney with brightly painted stones embedded in concrete and a concrete sailboat figure mounted on top of the chimney raincap. Because the cottages were built before electricity, there were a series of holes in the floors that could be used for cold storage, but these have all been filled in. There was also a space under the stairs (of the three cottages with stairs) to keep logs or for cold storage.<sup>47</sup> The fireplaces were also built oversized to accommodate the driftwood that was used for fuel.<sup>48</sup> The cottages have few straight lines or right angles. Cement pipes used for sewage and water lines made at the cement factory were used for vertical supports. Poles were used to support the formwork for the ceilings. The curved surfaces were created by hand-trowelling cement parge over wire mesh that was moulded on top of a base of logs and rocks that were collected from the beach.<sup>49</sup>

### **The Jeffersons' (Spencers')<sup>50</sup> Cottage, 1934**

The Jeffersons' Cottage was the first to be built, in 1934. It was originally a single story with a foundation formed by pouring concrete over coal ashes from the Kentville Sanatorium.<sup>51</sup> Mabel described the construction of this first cottage:

*... [Charlie] hauled logs up off the beach for the first cottage and then he sold that then he started building the other ones. But the one that we hauled the logs up someone got it and covered it all over with cement... and now you wouldn't know whether there was any logs there at all cause each one bought it would change it. Build a piece on.<sup>52</sup>*

Logs were only used to build up the back part of the cottage, but over time, they decayed and some time in the early 1950s Aubrey Wagner replaced the logs with cement.<sup>53</sup>

The Spencers purchased the cottage from the Macdonalds and then sold it to Aubrey Wagner. Wagner sold it to Frank Irving who in turn sold the cottage to Clara and Raymond Jefferson in 1970. The various owners have made a number of additions and renovations: the front porch was filled in to create another living room; a second floor was added with two bedrooms; and the original concrete roof was replaced with asphalt. The original fireplace still remains on the ground floor with the picture of the Three Sisters in Cape Breton that Charlie painted directly onto the concrete hearth.

### **The Round (Teapot) Cottage, 1935**

The Round Cottage was built in 1935, and became known as the Teapot Cottage. It was the most distinctive and famous of all the cottages. Mabel said that the cottage was "built just out of metal laths and concrete."<sup>54</sup> Sadly, the Teapot was demolished in the early 1980s (probably in June 1982) and only photographs remain.<sup>55</sup>

### **The Green Cottage, 1936(?)**

The Green Cottage was probably built in 1936. It was purchased by the Mansons, who had tented with the Macdonalds at the Point before the cottages were constructed. Pauline (Manson) Harris and her husband now own the cottage, and Mrs. Harris has many fond memories of the cottage and the Macdonalds.



Round (Teapot) Cottage (1934)



Green Cottage (c. 1936)



Blue Cottage (1937)

The cottage had the most angular roof of all the cottages, and the roof was made with cement squares that were painted green. However, the upkeep of the original roof was too much and they re-roofed the cottage with wood and asphalt. The cottage originally had an upstairs veranda overlooking the beach, but it was closed in when they re-roofed.<sup>56</sup>

### **The Blue Cottage, 1937**

The Blue Cottage was built in 1937. It was used as a hostel for visitors to the Point. Harold Whitman purchased the cottage from the Macdonalds in 1953, and owned the property until the early 1990s. The Fullers purchased the cottage & owned it for a short period before selling it to the Charles Macdonald House of Centreville Society in 1996.<sup>57</sup> In 1998, the Blue Cottage and the house in Centreville were designated as Provincially Registered Heritage Properties.<sup>58</sup>

Little has been done to alter the original appearance of the Blue Cottage. The only piece missing is the sailboat chimney piece, which had been badly damaged over time so the Society removed it temporarily for repairs. The original blue undulating roof is supported by white concrete walls of the second story, which in turn are supported by the first story concrete walls, which have beach stones on the exterior and bricks on the interior. Many of the beach stones are painted bright yellow, blue, or red, while a few remain their natural grey-brown colour.



Blue Cottage (present)

### **The Macdonald Cottage, 1938**

The Macdonald Cottage was the last cottage to be built and was the one in which Charlie and Mabel settled. The cottage has passed through the Macdonald family to Charlie's great-nephew, Fred Macdonald. The cottage has the most conventional appearance of all the cottages. The cottage is a compact L-shape, the upstairs veranda was closed in by Charlie and Mabel shortly after it was constructed, the second story

windows are shaped dormers, and two sides are covered by luscious vines. The only incongruities with the English Cottage image are the medium of construction, the bright red roof, and coloured stones.

The interior is the most sophisticated of the cottages. A narrower staircase leads to the second floor in a curving shape that is reminiscent of the Centreville House staircase. The central load-bearing, vertical cement pipe is ringed by a cement table and narrower shelves higher up. Indentations remain in the upstairs walls where the wood formwork supports once were and there are also indentations of narrower poles in the ceiling.



detail of sailboat on chimney



Macdonald Cottage



Macdonald Cottage (1938)

## Interpretations of the Cottages



Blue Cottage,  
graphite on paper, Pauline Alam



Macdonald Cottage,  
ink on mylar with collage, Carol Savoie

There have been a number of interpretations of the Huntington Point cottages. Their unusual shapes and construction certainly leads to speculation about the sources of inspiration. However, knowledge of his purpose and inspiration is limited to the interviews of Mabel and himself recorded in newspaper and magazine articles, and in the Charles Macdonald House of Centreville Society's archives. The specific details about his library and the titles of books and magazines that he read remains unknown. A number of the writers who interviewed him and Mabel allude to some publications, but it is certain that he was a widely read man whose sources of inspiration were diverse.

According to Patrick Laurette, author of *Charles Wm. Macdonald: Seaman, Labourer, Artist, Manufacturer (1874-1967)* (Art Gallery of Nova Scotia, Halifax, 1980), Macdonald's collection of cottages repeat "Carl Gustav Jung's own stone village project after 1913, a "play-therapy" following the psychologist's childhood model-making but which now served to reach his subconscious."<sup>59</sup> He goes on to argue that "like Jung, who gathered talismanic stones from the shore of a Swiss lake, the MacDonalds [sic.] brought their own stones from the local beach to serve as wall supports."<sup>60</sup> In many ways the cottages are more in the tradition of English eccentrics. Laurette compares Macdonald to Joseph Michael Gandy, a nineteenth century English architect who was named the "Wordsworth of Architecture." Gandy advocated the construction of extraordinary cottages by laymen and self-educated builders.<sup>61</sup>

Whether Macdonald built the cottages with Jung's conscious and detailed psychoanalytic purpose is difficult to prove. It is certain that they were sculptural experiments in form and material. He was inspired by his travels while a ship's carpenter between 1898 and the early 1900s. In a letter to his sister, he mentioned the bright colours of the houses in Santos, Brazil.<sup>62</sup> His sketch books also included drawings and paintings of houses from Brazil, the Mediterranean, Britain, and elsewhere. In colour scheme and style, the Blue Cottage is particularly reminiscent of his paintings from the Mediterra-

nean and Brazil. The white walls of the upper floor, the blue accents of the window frames and roof, and the style of the upstairs porch are evocative of his paintings from Greece, while the brightly coloured stones embedded in the lower walls allude to the brightly coloured buildings he saw in Santos.

As a well-read artist, Macdonald was probably also influenced by the modern architecture that was featured in art and technical magazines of the early twentieth century. It is likely that he was inspired in some way by the works of Russian and other European architects, particularly by their use of reinforced concrete and the use and appearance of concrete for housing. A number of people have suggested that the works of Gaudí were particularly influential. Although there is no indication from Macdonald's sketchbooks or journals that he visited Barcelona, it is possible that he saw Gaudí's works in publications and was inspired to explore his organic forms in cement. The piled-up effect of the stone work of the Church of Sagrada Família (1884), Güella Park and Colonia Güell (1900-1914) may have inspired the stone walls and chimneys of the Huntington Point cottages. The curvaceous, geomorphic designs of the façades and roofs of the structures in Güella Park, Casa Batlló (1905-7), and Casa Milá (1905-10) may also have inspired the curved roofs and dormers of the cottages.



Lantern at Blue Cottage,  
watercolour on paper,  
Jennet Bowdridge

## Structural Notes for the Blue Cottage



exterior wall detail



chimney detail

The cottage chosen for documentation at the Huntington Point site is known as the "Blue Cottage" because it has a blue roof. At this site we took measurements, photographs and sketches, and from these we made measured drawings. We also made observations about construction materials and techniques. Information about the cottages, and the Blue Cottage in particular, was also gathered from the Charles Macdonald House of Centreville Society Museum and Archives, community archives, and interviews. Some of the construction techniques used are obvious, but others are less so. In these instances we have surmised as to techniques used based on the mainly visual evidence with which we had to work. Another consideration in analyzing the cottages is the fact that the cottages were built during the Depression and Macdonald used whatever materials he could find, both scrap and what was found at the site. The resulting lack of uniformity gives the cottages their distinctive folk art character.

The main floor slab appears to have been poured directly on top of the soil. There are many cracks, especially outside of the building, which indicate that no reinforcement of any kind was used in the floor. 3 1/2" X 8" X 4" red brick was used on the inside walls of both the upstairs and downstairs. Although most of the bricks have "Canada" stamped on them, there is one upstairs that has "Scotland" stamped on it.

The first floor walls measure 12" thick at the bottom and 11" thick at the top, while the second floor walls measure 8" thick at the bottom and 7" thick at the top. These walls were parged and painted on the first floor but were left bare on the second floor. The outside of the walls are made of concrete with rocks of various sizes added for what appears to be more of a visual effect than for structural purpose, with the exception of the two columns, which are attached to the south side of the house under the covered patio, that seem to be mortared stack walls. The outside walls on the second floor do not have stones. There does not appear to be any space between the two layers of the walls. We surmise this based

on the fact that water has infiltrated the walls and it travels directly through. Had there been a cavity between the two, this leaking would likely not have occurred. Also, with the amount of moisture traveling through the walls we would have expected movement in at least one layer but there is no evidence to suggest this has occurred. Thus, we assume that there is wire mesh or some type of reinforcement tying the two wall layers together.

The stairs to the second floor seem to have been poured in place, but the construction of the supporting column around which the stairs wind, is of a construction technique not obvious to us. The second floor slab is poured-in-place and is only 3 1/4" thick. It seems that the formwork consisted of pouring the concrete over odd sized pieces of wood that were covered with some type of woven material, the weave of which is evident in its imprint in the cement. We assume from the distances that this slab spans without beams or other columnar supports that it is reinforced, with what we are not sure.

The roof is a combination of wood frame construction for the supporting structure with a type of ferro-cementing technique used for the outside shell. The formwork was covered with odd pieces of salvaged, flattened metal, wire mesh was used for reinforcement. Cement was then parged\* over this to create the shell. This is evident from the roof of the upstairs veranda. The roof over the main level patio on the south side was added to the cottage at a later date, this is evident from photographs, some of which show the cottage without the covered patio. We have been unable to determine when the addition was made.

The windows are all single pane and most do not open. They are framed with wood and set directly into the brick and cement walls. Concrete lintels 10 cm. thick, are visible above most of the windows on the outside of the walls. The positioning of these lintels varies throughout the cottage: some seem to be positioned to carry a load while others seem to



interior of roof



ground floor window-wall detail



staircase detail



parged tree trunk,  
Macdonald House

act as a drip edge above windows. The outside sills of the windows are cement and are consistently sloped downward to let the water run off. There is a small retaining wall along the outside of the uphill side of the cottage and there is also a little ditch on either side of the cottage . All of these features lead us to believe that these were attempts to rectify an acknowledged water problem. One also notices from historical pictures that the present washroom once had a window in the southwest wall. This window is no longer present.

The columns are made with various building techniques, only some of which we can surmise. There is evidence from researched information that some of the columns in Macdonald's buildings are made by parging vertically stacked cement sewer pipes. He also made columns from parging trees, as seen at the Centerville house (the clothesline pole). The newer, attached columns in the covered patio are of a mortared stack-wall technique but the rest we can only guess at how they were made.



carport detail

Currently, the cottage is in need of repair for the perpetual leaks that seem to plague all of these cement buildings. Various attempts at restoring and improving water penetration problems at all of the cottages and the Centerville house have been made with varying degrees of success. This has been an ongoing problem which will hopefully be rectified soon.



covered patio

## Measured Technical Drawings

Floorplans

Wall Tilt diagrams

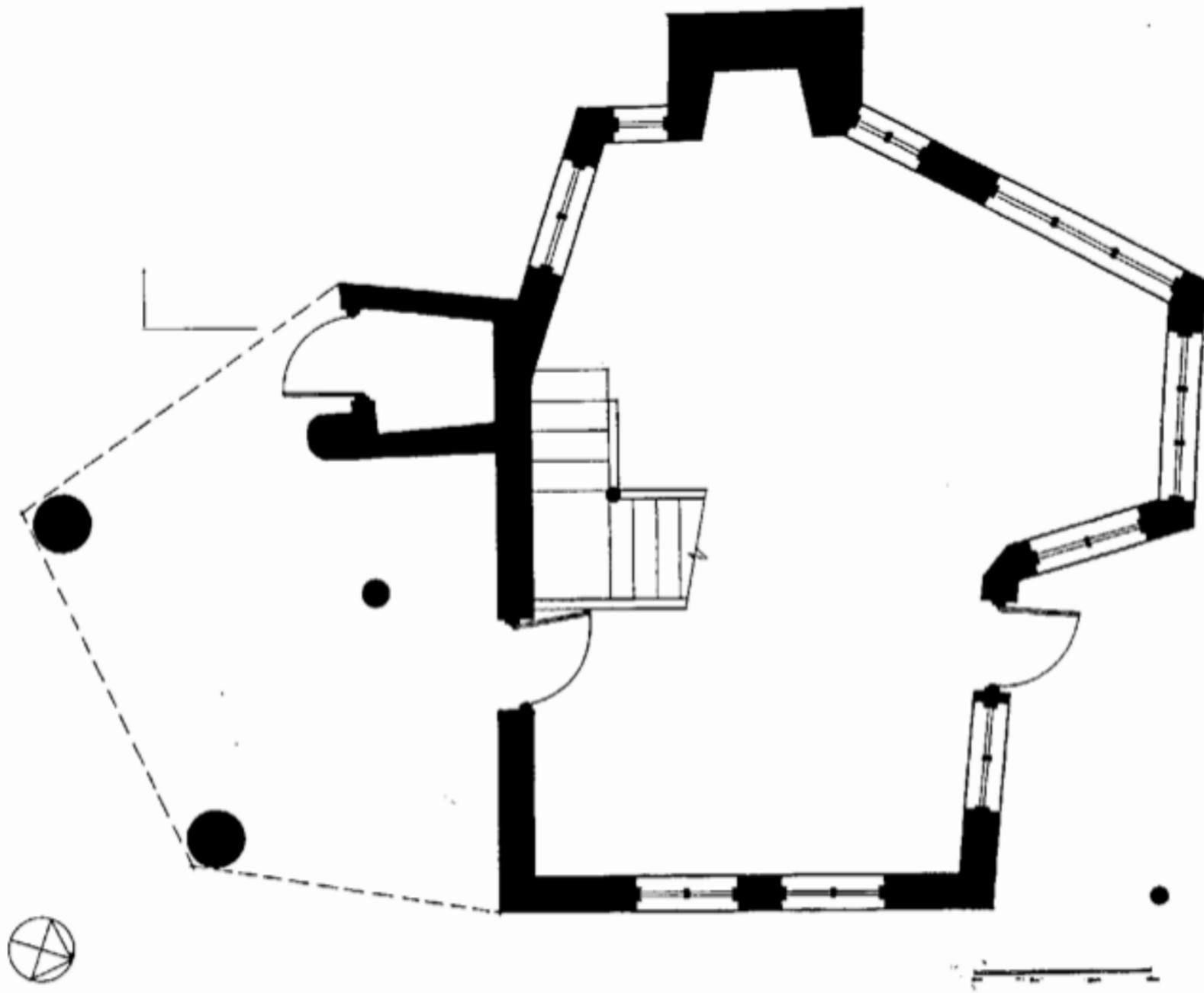
Elevations

Section

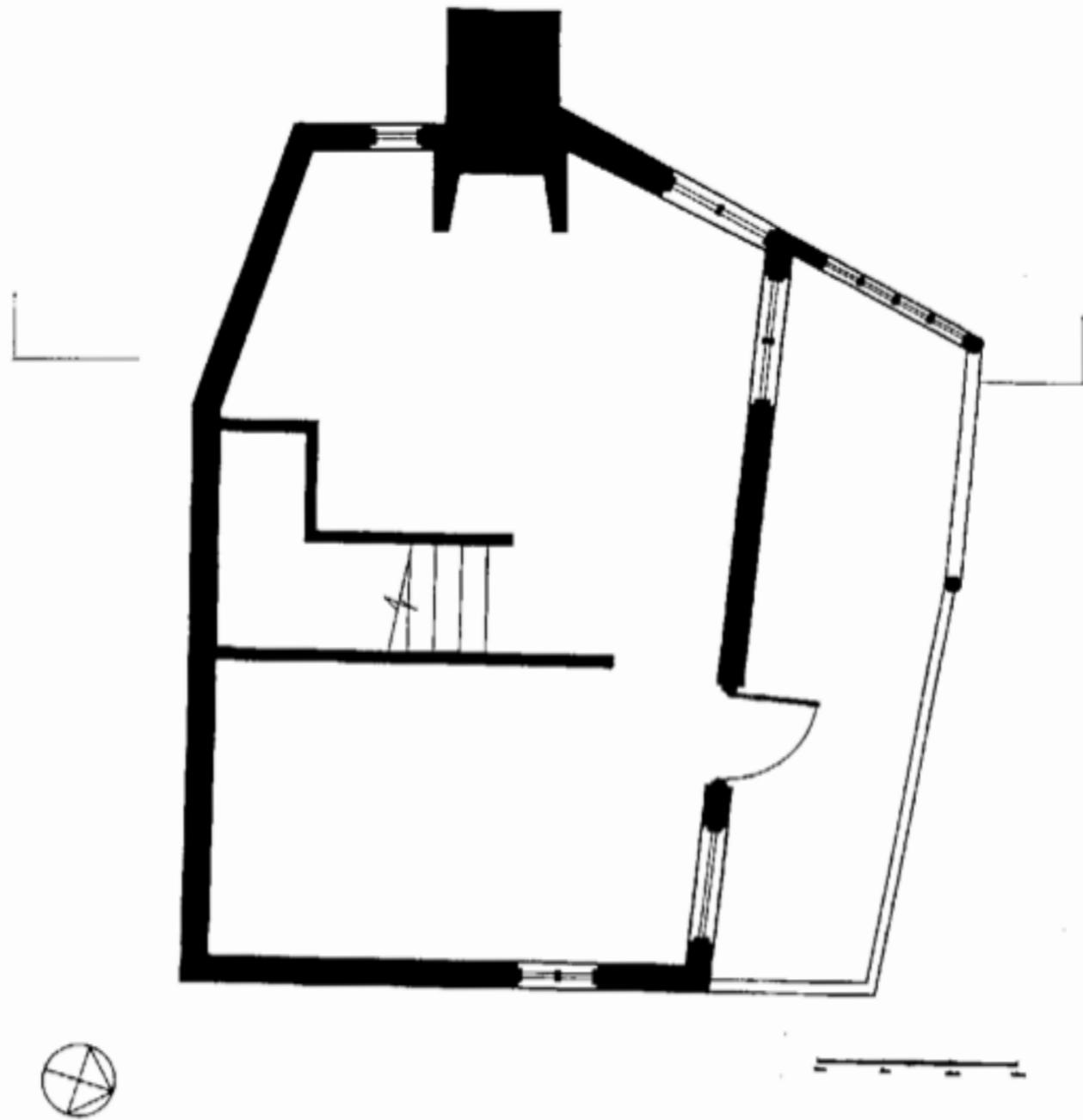
Construction Details

These drawings are intended as a graphical representation of the Blue Cottage which approximate its size, configuration and location. Care has been taken to ensure the best possible quality, however the drawings are not intended to be used for legal descriptions or to calculate exact dimensions.

Plans



Ground floor plan,  
Blue Cottage



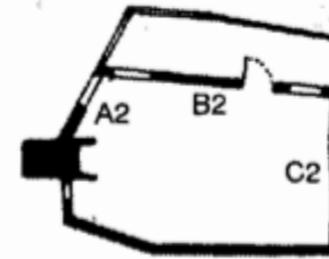
Second floor plan,  
Blue Cottage

# Inner wall tilt diagram

ground floor



second floor



A



B



C



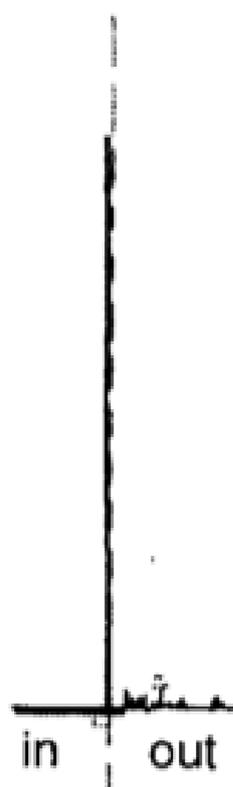
D



E



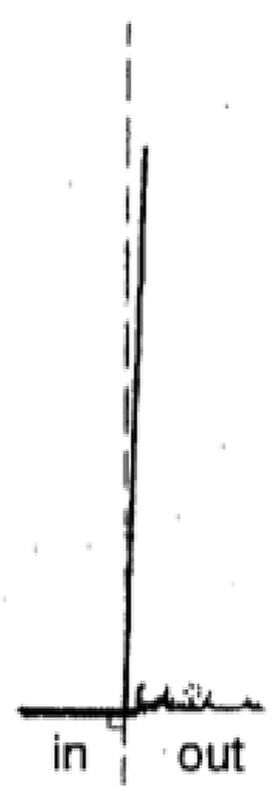
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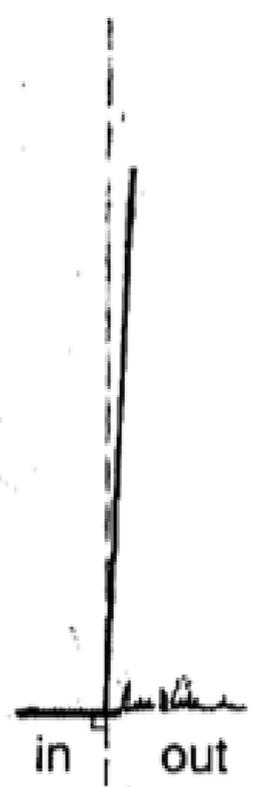
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H



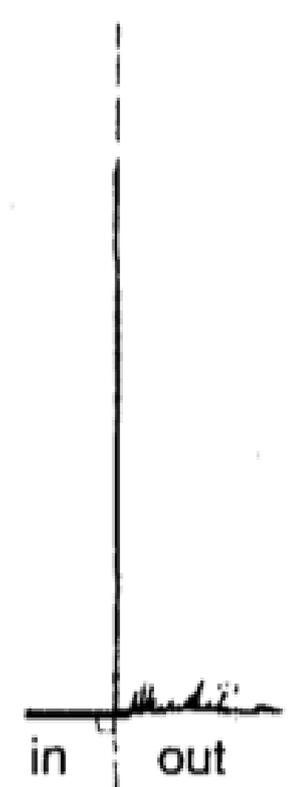
I



A2



B2



C2



# Elevations



North Elevation



South Elevation





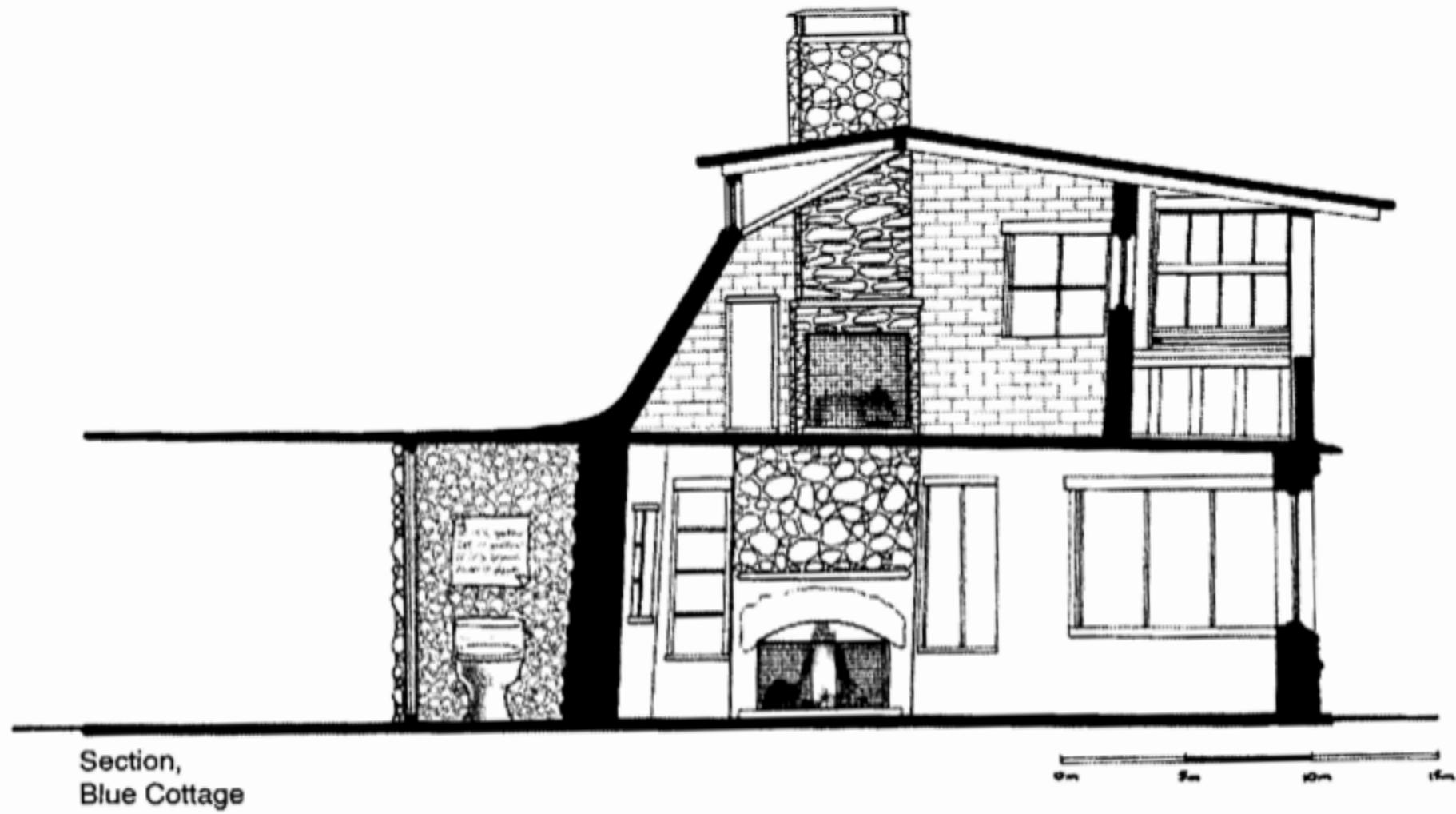
West Elevation

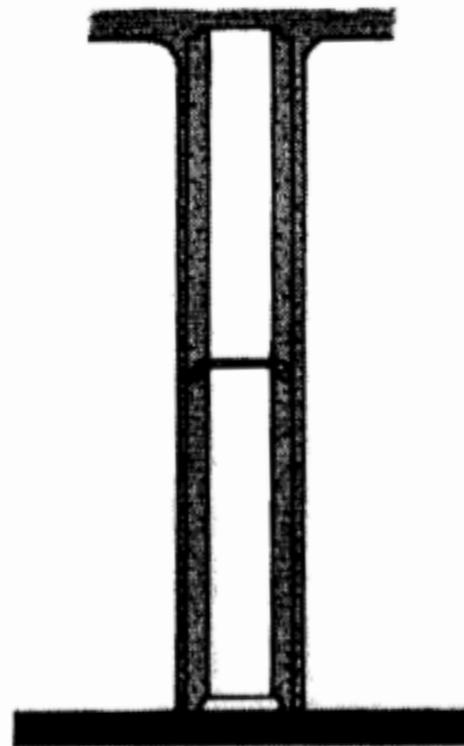


East Elevation



# Details

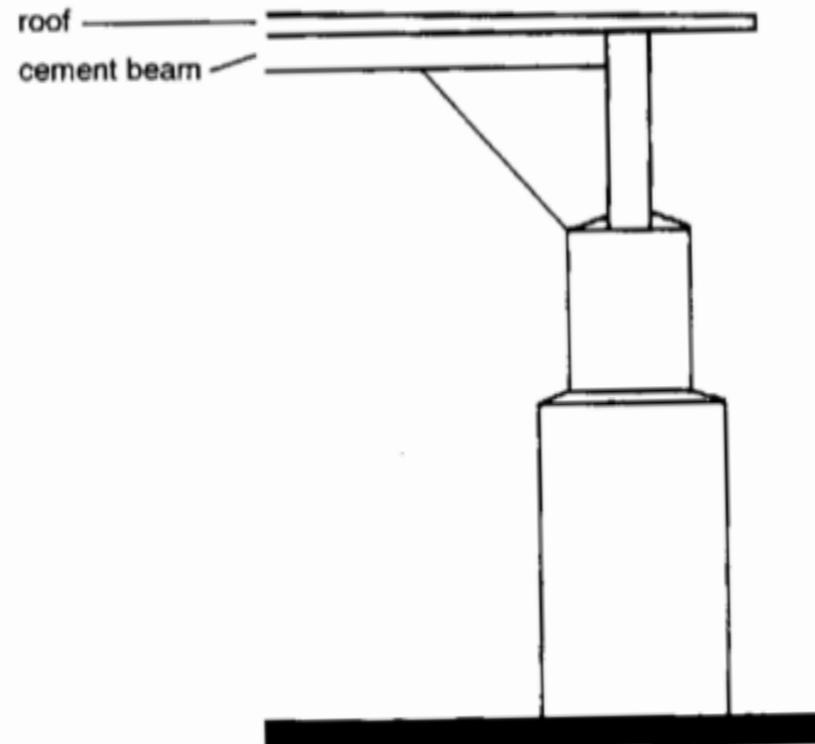




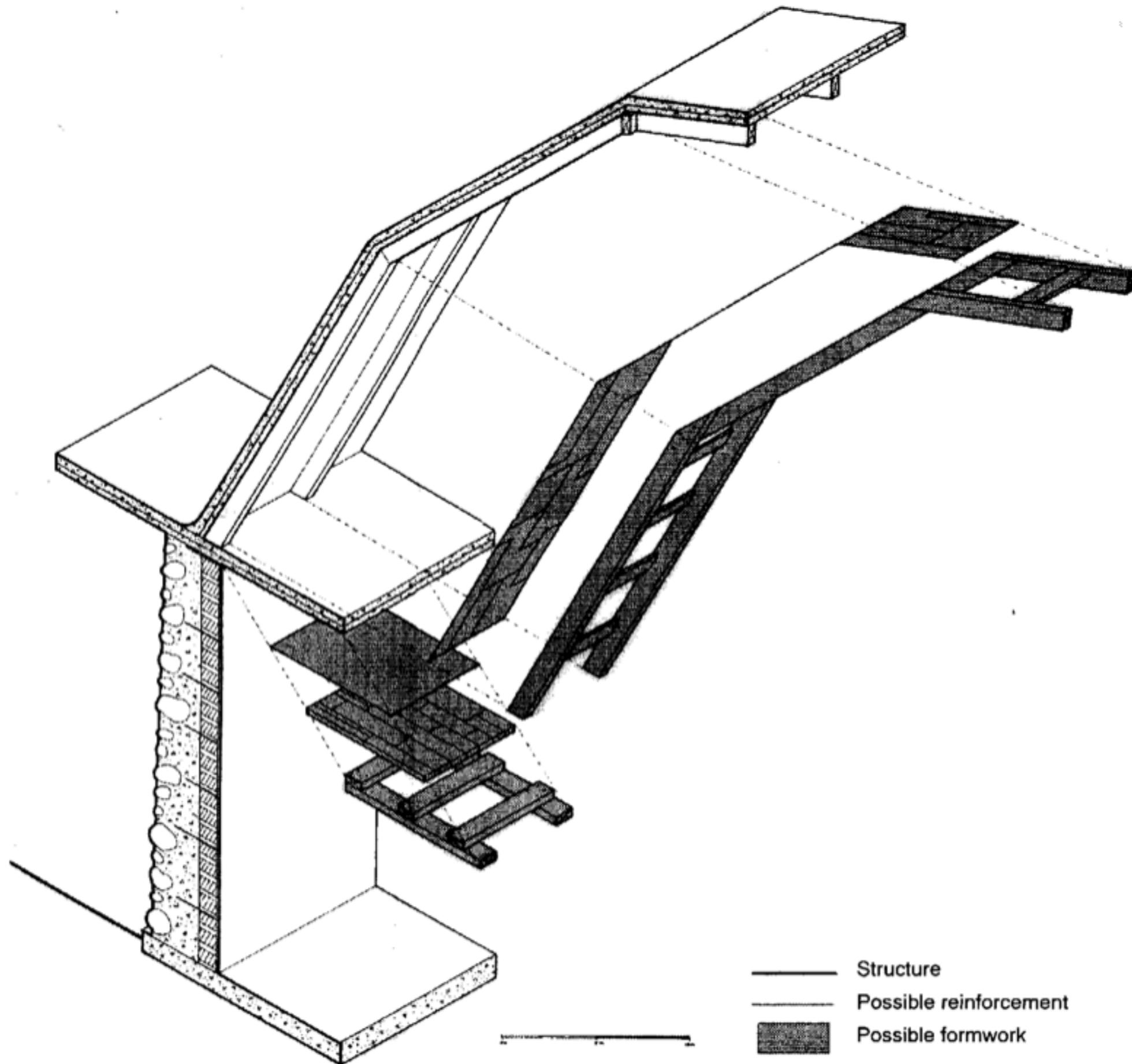
Section, parged sewer pipe column



Section, parged tree trunk column



Elevation, column under carport



## Definitions

### **CONCRETE:**

A rock like material produced by combining coarse and fine aggregates, portland cement, and water and allowing the mixture to harden.

### **CEMENT:**

A combination of lime, iron, silica and alumina. Exact ingredients used depends on what is readily available and what geographic region the material comes from.

### **MORTAR:**

A substance used to join masonry units, consisting of cement, fine aggregate and water.

### **PARGE:**

A portland cement plaster applied over masonry to make it less permeable to water.

Recipe:

1 part masonry cement  
3 parts sand

### **FERROCONCRETE:**

A combination of iron and concrete. Often thin concrete shells can be made by using this technique to reinforce the concrete.



second floor fireplace,  
Blue Cottage



interior wall-roof detail,  
Macdonald House

## Endnotes



bird sculpture,  
Macdonald Cottage

1. Patrick Laurette says that Macdonald sailed to Brazil on the 1000-ton barque, "Baltimore," but according to other records in the Society's archives, he sailed aboard the "Francis S. Hampshire," a Baltimore clipper. See Patrick Condon Laurette, Charles Wm. Macdonald: Seaman, Labourer, Artist, Manufacturer (1874-1967) (Art Gallery of Nova Scotia, Halifax, 1980), p. 3; Charles Macdonald House of Centreville Society Archives, n.d, n.p.
2. Laurette, Charles Wm. Macdonald, p. 4.
3. Charles Macdonald, letter to "Sister," September 28, 1898 (unpublished).
4. Laurette, Charles Wm. Macdonald.
5. Tim Buck, in Laurette, Charles Wm. Macdonald, p. 6-7.
6. Charles Macdonald, notebook, n.d. (unpublished, in Legge Collection, Charles Macdonald House of Centreville Society Archive).
7. Laurette, Charles Wm. Macdonald, p. 6-7.
8. In Patty Mintz, "Huntington Point's unique, old, 'fairy tale cottages'," *The Friday Advertiser*, August 4, 1989, p. 1B.
9. Mintz, "Huntington Point's unique, old, 'fairy tale cottages'," p. 1B.
10. Interview, Fred Macdonald, Huntington Point, July 5, 2000.
11. Rosa (Fillmore) Skinner, interview, July 29, 1997 (unpublished, in Charles Macdonald House of Centreville Society Archive).
12. In Laurette, Charles Wm. Macdonald, p. 3.
13. See M. Trachtenberg and I. Hyman, *Architecture: From Prehistory to Post-Modernism* (Harry N. Abrams, Amsterdam), p. 511-514; Arnold Whittick, Eric Mendelsohn (F.W. Dodge Corp., New York, 1956), p. 28-29.

14. Trachtenberg and Hyman, *Architecture*, p. 520.
15. Trachtenberg and Hyman, *Architecture*, p. 520; Whittick, Eric Mendelsohn, p. 28-29.
16. Trachtenberg and Hyman, *Architecture*, p. 521; Architectural Association, *Czech Functionalism: 1918-1938* (Architectural Association Print Studio, London, 1987), p. 14-15.
17. Joan Bergós, *Gaudí: The Man and His Work* (Little Brown and Company, Boston, 1999), p. 67-68; Trachtenberg and Hyman, *Architecture*, p. 511-512.
18. Whittick, Eric Mendelsohn, p. 28-29; Trachtenberg and Hyman, *Architecture*, p. 513-514.
19. Kathleen James, *Erich Mendelsohn and the Architecture of German Modernism* (Cambridge University Press, Cambridge, 1997), p. 3.
20. James, *Erich Mendelsohn and the Architecture of German Modernism*, p. 26.
21. Trachtenberg and Hyman, *Architecture*, p. 520-521.
22. Emily Kies Folpe, "Architectural Drawings of the Russian Avant-garde," in Irena Zantovská Murray, *Soviet Avant-garde Publications: Architectural Drawings of the Russian Avant-garde, 1917-1935* (Centre Canadien d'Architecture/Canadian Centre for Architecture, Montreal, 1991), p. 21-24; Anatole Kopp, *Constructivist Architecture in the USSR* (Academy Editions, London, 1985), p. 19-21; Yu Gerchuk, "Konstantin Melnikov," in O.A. Shvidkovsky (editor), *Building in the USSR 1917-1932* (Studio Vista, London, 1971), p.58.
23. Gerchuk, "Konstantin Melnikov," p.64-65.
24. Folpe, "Architectural Drawings of the Russian Avant-garde," p. 21-24.



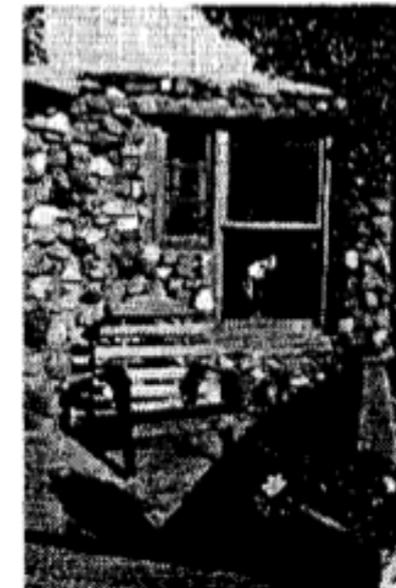
window detail,  
Red Cottage



stair railing detail,  
Macdonald House

25. Evzen Linhart, 1930, in Architectural Association, *Czech Functionalism: 1918-1938* (Architectural Association Print Studio, London, 1987), p. 26.
26. *Ibid.*, p. 48-49.
27. James, Erich Mendelsohn and the Architecture of German Modernism, p. 202; Trachtenberg and Hyman, *Architecture*, p. 533-534.
28. Arthur W. H. Eaton, *The History of Kings County* (The Salem Press Company, Salem MA, 1910), p. 156-157; Brent Fox, "Hall's Harbour: tales of pirates, a pasha, and the sea." *The Advertiser*, Tuesday May 19, 1998, p. 27, 42; Public Archives of Nova Scotia, *Place-Names and Places of Nova Scotia* (Mika Publishing Company, Belleville, ON, 1982, 3rd Printing), p. 276-277.
29. Brent Fox, "Hall's Harbour," p. 27, 42.
30. Brent Fox, "Hall's Harbour up for tourism designation," *The Advertiser*, Tuesday April 11, 2000, p. 1, 3.
31. Old Courthouse Museum and Archives, Kentville, "Community History Binder: Hall's Harbour," n.d.; Brent Fox, "Hall's Harbour," p. 27, 42.
32. The site is across Huntington Point Road from the Macdonald cottages. Thelma A. (Pineo) Brydon, *Memoirs*, transcribed by Mary (Brydon) Bishop, unpublished, n.d. (? 1980s), 4; Interview, Pauline Harris, Huntington Point, NS, July 15, 2000.
33. Ted Simpson, *The Foaming Billows in Nova Scotia* (Ted Simpson: Halls Harbour, 1975), pp 19; Brydon, *Memoirs*, pp 4.
34. Halley Neville, unpublished notes, n.d.
35. Ted Simpson, *The Foaming Billows in Nova Scotia*, 19-21.

36. Interview, Richard Parker, Halls Harbour, July 7, 2000; Interview, Pauline Harris, Huntington Point, NS, July 15, 2000.
37. Interview, Pauline Harris, Huntington Point, NS, July 15, 2000; Interview, Wayde Brown, Halifax, NS, July 17, 2000.
38. Laurette, Charles Wm. Macdonald, p. 11.
39. Karel Honzik, 1932, in Architectural Association, Czech Functionalism: 1918-1938 (Architectural Association Print Studio, London, 1987), p. 69.
40. Interview of Mabel Macdonald by Joan Kennedy, Centreville, April 28, 1978.
41. Ibid.
42. Ibid.
43. Ibid.
44. In Charles Macdonald House of Centreville Society Archives, n.d.
45. Laurette, Charles Wm. Macdonald: Seaman, Labourer, Artist, Manufacturer (1874-1967), p. 15.
46. Interview of Mabel Macdonald by Joan Kennedy, Centreville, April 28, 1978.
47. Interview, Pauline Harris, Huntington Point, NS, July 15, 2000.
48. Ibid.
49. Patty Mintz, "Huntington Point's unique, old, 'fairy tale cottages'," The Friday Advertiser, August 4, 1989, p. 1B.
50. Pauline Harris referred to this cottage as the Spencers' Cottage because the Spencers were the first owners. Interview, Pauline



patio, Macdonald Cottage



Blue Cottage

Harris, Huntington Point, NS, July 15, 2000.

51. Interview, Raymond and Clara Jefferson, Huntington Point, NS, July 5, 2000

52. Interview of Mabel Macdonald by Joan Kennedy, Centreville, April 28, 1978.

53. Interview, Pauline Harris, Huntington Point, NS, July 15, 2000.

54. Interview of Mabel Macdonald by Joan Kennedy, Centreville, April 28, 1978.

55. The Advertiser noted in a July 1982 article that the newspaper had received a number of phone calls that the tea pot cottage had been bulldozed. See The Advertiser, July 1982, n.p.; interview, Raymond and Clara Jefferson, Huntington Point, NS, July 5, 2000.

56. Interview, Pauline Harris, Huntington Point, NS, July 15, 2000.

57. Patty Mintz, "Huntington Point's unique, old, 'fairy tale cottages'," The Friday Advertiser, August 4, 1989, p. 1B.

58. Charles Macdonald House of Centreville Society, "Concrete Thoughts: the Occasional Newsletter of the Charles Macdonald House of Centreville Society," January 2000, p. 3; Charles Macdonald House of Centreville Society, "A Cultural Landmark: Charles Macdonald's House in Centreville" (brochure), n.d.

59. Patrick Condon Laurette Charles Wm. Macdonald: Seaman, Labourer, Artist, Manufacturer (1874-1967) (Art Gallery of Nova Scotia, Halifax, 1980), p. 12-13.

60. Ibid.

61. Ibid., p. 13.

62. See section about Charles Macdonald. Charles Macdonald, letter to "Sister," September 28, 1898 (unpublished).

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Charles Macdonald, "In Santos, Brazil," in Patrick Condon Laurette, *Charles Wm. Macdonald: Seaman, Labourer, Artist, Manufacturer (1874-1967)* (Art Gallery of Nova Scotia, Halifax, 1980), p. 5, Plate 4.

Charles Macdonald, "Pompeii and Vesuvius", in Patrick Condon Laurette, *Charles Wm. Macdonald: Seaman, Labourer, Artist, Manufacturer (1874-1967)* (Art Gallery of Nova Scotia, Halifax, 1980), p. 13, Plate 21.

Charles Macdonald with Painted Concrete Fawn, in Patrick Condon Laurette, *Charles Wm. Macdonald: Seaman, Labourer, Artist, Manufacturer (1874-1967)* (Art Gallery of Nova Scotia, Halifax, 1980), p. 8, Plate 10.

Peter Behrens, "Turbinenfabrik," in M. Trachtenberg and I. Hyman, *Architecture: From Prehistory to Post-Modernism* (Harry N. Abrams, Amsterdam), p. 522, figure 826.

Erich Mendelsohn, "Einstein Tower," in Kathleen James, *Erich Mendelsohn and the Architecture of German Modernism* (Cambridge University Press, Cambridge, 1997), p. 12, figure 2.

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K.S. Melnikov, "Melnikov House," in Yu Gerchuk, "Konstantin Melnikov," in O.A. Shvidkovsky (editor), *Building in the USSR 1917-1932* (Studio Vista, London, 1971), p. 64, figure 93.

Jan Kotera, "Villa Macha," in in Architectural Association, *Czech Functionalism: 1918-1938* (Architectural Association Print Studio, London, 1987), p. 26, figure 2.